

Mathematics A.S.

Career Community: Science and Mathematics

Curriculum Code: 1620

Effective: Fall 2025 - Summer 2030

Purpose of the Major

This degree is designed for students who plan to transfer to a four-year university to pursue a Bachelor's of Science degree in Mathematics with a variety of concentrations. Students completing this degree will also satisfy Michigan Transfer Agreement (MTA) between two-year and four-year institutions in Michigan and qualify for an LCC Transfer Studies Certificate of Achievement (1482). This degree includes a set of courses common to all Science and Mathematics majors and many transfer institutions. Students are encouraged to work with an academic advisor and program advisor to explore transfer opportunities.

Not all courses in this pathway transfer to all colleges. Students who wish to transfer to a four-year institution should select coursework indicated for that institution.

Milestone

In addition to the required General Education courses in Math and English, completion of MATH 151 and MATH 152 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

A student must earn a minimum grade of 2.0 in all courses.

Contact Information

For further information, including career options, course substitutions and waivers, etc., contact the Mathematics Department, Arts and Sciences Building, Room 3203, telephone number 517-483-1092, or the Academic Advising Department, Gannon Building - StarZone, telephone number 517-483-1904.

Major Required Courses - Some courses meet General Education requirements for MTA. A minimum of 2.0 is required to transfer to other colleges (some colleges, and some programs within colleges, require a higher grade in a course.)

Course Code	Course Title	Credit / Billing Hours
ACAD 100	First-Year Experience	1/1
CHEM 151	General Chemistry Lecture I	4/4
CHEM 161	General Chemistry Lab I	1/3

Course Code	Course Title	Credit / Billing Hours
COMM 120 or	Dynamics of Communication	3/3
COMM 130 or	Fundamentals Public Speaking	3/3
COMM 200 or	Small Group Communication	3/3
COMM 240 or	Interpersonal Communication	3/3
COMM 260 or	Nonverbal Communication	3/3
ENGL 122 or	Composition II	4/4
ENGL 132	Honors Composition II	4/4
CPSC 101	Intro to Computer Science	3/3
CPSC 230	Algorithms and Computing w/C++	4/4
CPSC 260	Computer Science Structures	4/4
ENGL 121 or	Composition I	4/4
ENGL 131	Honors Composition I	4/4
MATH 151	Calculus I	4/4
MATH 152	Calculus II	4/4
MATH 253	Calculus III	4/4
MATH 254	Intro to Differential Equation	4/4
MATH 260	Linear Algebra	4/4
PHIL 151	Intro to Logic & Critical Think	4/4
PHYS 251	Physics I with Calculus	5/7

Notes:

ACAD 100 may be waived when students meet one of the following College-approved waiver criteria:

- Completion of 12 college-level credits with minimum grades of 2.0 shown on the LCC transcript (including transfer, if applicable), or
- Employment in the field of, or a field related to, the degree being sought, or
- For Health Careers students, successful completion of CHSE 100.

Students wishing to waive ACAD 100 should contact their advisor.

CPSC 260 is only offered in Spring semester.

Major Required Courses, Limited Choice – Humanities and Fine Arts - Select one course, of a different discipline than PHIL, from <u>LCC General Education, Transfer Degrees (MTA)</u>, <u>Humanities and Fine Arts</u>.

Major Required Courses, Limited Choice – Social Sciences - Select two courses from LCC General Education, Transfer Degrees (MTA), Social Sciences. Courses must be from different disciplines.

Notes:

Students considering adding Secondary Education Certification in Math or Science in order to teach in Michigan Public Schools are strongly encouraged to select PSYC 200 and EDUC courses as listed to meet the Michigan Transfer Agreement (MTA) Social Science requirement.

For future transfer (Secondary Education Certification) choose PSYC 200.

For future transfer (Secondary Education Certification) to:

- Central Michigan University, Ferris State University, or Michigan State University choose EDUC 204.
- Eastern Michigan University, Grand Valley State University, University of Michigan Flint, or Western Michigan University choose EDUC 220.

General Education – Transfer Degrees (MTA)

- English Composition
 Major Required Courses meet this requirement.
- English Composition (second course)/Communication Major Required Courses meet this requirement.
- Humanities and Fine Arts
 Major Required Courses meet this requirement.
- Mathematics
 Major Required Courses meet this requirement.
- Natural Sciences
 Major Required Courses meet this requirement.
- Social Sciences
 Major Required Courses meet this requirement.

Elective Courses

Complete courses as needed from the list of <u>AA and AS Elective Courses</u> to reach the 60-credit minimum for an associate degree. Courses used to fulfill the requirements above cannot be used as Elective courses. For course selections, speak with an advisor or consult the program website(s) at the institution(s) you are considering for transfer.

Minimum Total Credit Hours

61 credits / 65 billing hours

Recommended Course Sequence

SemesterI
ACAD 100
ENGL 121 or ENGL 131
MATH 151 – Milestone course

SemesterI
PHIL 151
Limited Choice – Social Sciences

SemesterII
CHEM 151
CHEM 161
COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132
CPSC 101
MATH 152 – Milestone course

SemesterIII
CPSC 230
MATH 253
PHYS 251
Limited Choice – Social Sciences

SemesterIV
CPSC 260
MATH 254
MATH 260
Limited Choice – Humanities and Fine Arts

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.